

CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. **(Withdrawn)** A battery, comprising:

a case;

a cell within the case, the cell comprising:

a plurality of plates; and

a plurality of separators, the plates and separators being arranged so that for each pair of adjacent plates:

a first plate forms an anode plate and a second plate forms a cathode plate; and

a separator is disposed between the anode plate and the cathode plate; and

a fibrous material within the case, at least some of the fibrous material being between the cell and the case, wherein, immediately prior to addition into the case, at least five weight percent of the fibrous material is capable of passing through a 4x4 mesh during a shake test.
2. **(Withdrawn)** The battery of claim 1, wherein the battery is a lead acid battery.
3. **(Withdrawn)** The battery of claim 2, further comprising sulfuric acid within the case.
4. **(Withdrawn)** The battery of claim 3, wherein a first portion of the sulfuric acid is adsorbed on the

fibrous material.
5. **(Withdrawn)** The battery of claim 4, wherein a second portion of the sulfuric acid is adsorbed in the

separators.

6. **(Withdrawn)** The battery of claim 2, wherein the battery is a valve regulated lead acid battery.

7. **(Withdrawn)** The battery of claim 6, wherein the battery is an AGM-type valve regulated lead acid battery.

8. **(Withdrawn)** The battery of claim 6, wherein the battery is a flooded valve regulated lead acid battery.

9. **(Withdrawn)** The battery of claim 6, wherein the battery is a gel valve regulated lead acid battery.

10. **(Withdrawn)** The battery of claim 1, wherein the battery is a nickel metal hydride battery.

11. **(Withdrawn)** The battery of claim 10, wherein the fibrous material comprises a polymeric material.

12. **(Withdrawn)** The battery of claim 1, wherein the fibrous material comprises a siliceous fibrous material.

13. **(Withdrawn)** The battery of claim 1, wherein the fibrous material comprises C glass.

14. **(Withdrawn)** The battery of claim 1, wherein the fibrous material comprises a polymeric material.

15. **(Withdrawn)** The battery of claim 1, wherein the fibrous material comprises an inorganic material.

16. **(Withdrawn)** The battery of claim 1, wherein the fibrous material comprises an organic material.

17. **(Withdrawn)** The battery of claim 1, wherein a first portion of the fibrous material comprises an organic material and a second portion of the fibrous material comprises an inorganic material.

18. (Cancelled)
19. (Withdrawn) The battery of claim 1, wherein, immediately prior to addition into the case, at least five weight percent of the fibrous material is capable of passing through a 8x8 mesh during the shake test.
20. (Withdrawn) The battery of claim 1, wherein, immediately prior to addition into the case, at least five weight percent of the fibrous material is capable of passing through a 6x6 mesh during the shake test.
21. (Withdrawn) The battery of claim 1, wherein the fibrous material has an acid absorption of at least 50%.
22. (Withdrawn) The battery of claim 1, wherein the fibrous material is disposed in a gelling agent.
23. (Withdrawn) The battery of claim 1, wherein the particles of a material are mixed with the fibrous material.
24. (Withdrawn) The battery of claim 23, wherein the particles of the material comprise silica particles.
25. (Withdrawn) The battery of claim 1, wherein the fibrous material has an average length of from 0.1 millimeter to 1.5 millimeters.
26. (Withdrawn) The battery of claim 1, wherein the fibrous material has an average diameter of less than 40 microns.
27. (Withdrawn) The battery of claim 1, wherein the fibrous material has an average aspect ratio of less than 1,500.
28. (Withdrawn) The battery of claim 1, wherein the battery has a head space between the cell and the case, and a portion of the fibrous material is in the head space.
29. (Withdrawn) The battery of claim 1, wherein the battery has a fringe volume between the cell and the case, and a portion of the fibrous material is in the fringe volume.
30. (Withdrawn) The battery of claim 1, wherein at least some of the fibrous

material is adsorbed in at least one of the separators.

31. **(Withdrawn)** The battery of claim 30, further comprising sulfuric acid adsorbed in the at least one of the separators.

32. **(Withdrawn)** The battery of claim 30, further comprising sulfuric acid adsorbed in the at least one of the separators.

33. **(Currently Amended)** A process for manufacturing a battery having a case and a plurality of electrodes, the process comprising:

~~combining, with an electrolyte, a fibrous material in fiber form with an electrolyte, wherein, immediately prior to combining with the electrolyte, at least five weight percent of the fibrous material is capable of passing through a 4x4 mesh during a shake test; and~~

disposing the combination of the fibrous material and the electrolyte in the case of the battery and between the battery's electrodes.

34. **(Original)** The process of claim 33, wherein the electrolyte comprises sulfuric acid.

35. **(Original)** The process of claim 33, wherein the electrolyte comprises potassium hydroxide.

36. **(Cancelled)**

37. **(Cancelled)**

38. **(Cancelled)**

39. **(Original)** The process of claim 33, wherein the case is substantially devoid of any electrolyte before the electrolyte is disposed in the case.

40. **(Original)** The process of claim 33, wherein the battery comprises a cell within the case, the cell comprising:

a plurality of plates;

and a plurality of separators,

wherein the plates and separators are arranged so that for each pair of adjacent plates:

a first plate forms an anode plate and a second plate forms a cathode plate; and

a separator is disposed between the anode plate and the cathode plate.

41. **(Original)** The process of claim 40, wherein the battery has a head space between the cell and the case, and at least a portion of the fibrous material is disposed within the head space.

42. **(Original)** The process of claim 40, wherein the battery has a fringe volume between the cell and the case, and at least a portion of the fibrous material is disposed within the fringe volume.

43. **(Original)** The process of claim 40, wherein the cell is constructed before the fibrous material is disposed within the case.

44. **(Original)** The process of claim 40, wherein the cell is constructed before the electrolyte is disposed within the case.

45. **(Original)** The process of claim 33, wherein the battery is a lead acid battery.

46. **(Original)** The process of claim 33, wherein the battery is a nickel metal hydride battery.

47. **(Original)** The process of claim 33, wherein the fibrous material comprises a siliceous material.

48. **(Original)** The process of claim 33, wherein the fibrous material has an average length of from 0.1 millimeter to 1.5 millimeters.

49. **(Original)** The process of claim 33, wherein the fibrous material has an average diameter of less than 40 microns.

50. **(Original)** The process of claim 33, wherein the fibrous material has an average aspect ratio of less than 1,500.

51. (Currently Amended) A process for manufacturing a battery having a case, the process comprising:

constructing a cell in the case of the battery;

wherein the cell comprises:

a plurality of plates; and

a first plate forms an anode plate and a second plate forms a cathode plate

and

after constructing the cell, disposing a fibrous material in fiber form~~filler~~ in the case and between the plates, ~~wherein, immediately prior to addition into the case, at least five weight percent of the fibrous material is capable of passing through a 4x4 mesh during a shake test,~~

~~wherein the cell comprises:~~

~~a plurality of plates; and~~

~~a plurality of separators, the plates and separators being arranged so that for each pair of adjacent plates:~~

~~a first plate forms an anode plate and a second plate forms a cathode plate; and~~

~~a separator is disposed between the anode plate and the cathode plate.~~

52. (Original) The process of claim 51, further comprising disposing an electrolyte in the case.

53. (Original) The process of claim 52, wherein the electrolyte comprises sulfuric acid.

54. (Original) The process of claim 52, wherein the electrolyte comprises potassium hydroxide.

55. (Original) The process of claim 52, wherein the electrolyte is disposed in the

case before the fibrous material is disposed in the case.

56. (Original) The process of claim 52, wherein the electrolyte is disposed in the case after the fibrous material is disposed in the case.

57. (Original) The process of claim 52, wherein the case is substantially devoid of any electrolyte before the electrolyte is disposed in the case.

58. (Original) The process of claim 51, wherein the battery has a head space between the cell and the case, and at least a portion of the fibrous material is disposed within the head space.

59. (Original) The process of claim 51, wherein the battery has a fringe volume between the cell and the case, and at least a portion of the fibrous material is disposed within the fringe volume.

60. (Original) The process of claim 51, wherein the battery is a lead acid battery.

61. (Original) The process of claim 51, wherein the battery is a nickel metal hydride battery.

62. (Original) The process of claim 51, wherein the fibrous material comprises a siliceous material.

63. (Original) The process of claim 51, wherein the fibrous material has an average length of from 0.1 millimeter to 1.5 millimeters.

64. (Original) The process of claim 51, wherein the fibrous material has an average diameter of less than 40 microns.

65. (Original) The process of claim 51, wherein the fibrous material has an average aspect ratio of less than 1,500.

66. (New) A process for manufacturing a battery having a case and a plurality of electrodes, the process comprising:

disposing fibrous material in fiber form in a battery case and between the battery's electrodes,

adding an electrolyte to the case and between the battery's electrodes.

67. (New) A process for manufacturing a battery having a case and a plurality of electrodes, the process comprising:

disposing an electrolyte in a battery case and between the battery's electrodes,

adding fibrous material in fiber form, to the battery case and between the battery's electrodes.

68. (New) The process of claim 51, wherein the cell further comprises

a plurality of separators, the plates and separators being arranged so that for each pair of adjacent plates:

a first plate forms an anode plate and a second plate forms a cathode plate; and

a separator is disposed between the anode plate and the cathode plate.

69. (New) A process for manufacturing a battery having a case and a plurality of electrodes, the process comprising:

combining, with an electrolyte, a fibrous material in fiber form-and

disposing the combination of the fibrous material in fiber form and the electrolyte in the case of the battery and

adding electrode plates to the case so that the fibrous material is between the electrode plates.

70. (New) The method claim 33, wherein , at least five weight percent of the fibrous material is capable of passing through a 4x4 mesh during a shake test.

71. (New) The method claim 51, wherein , at least five weight percent of the fibrous material is capable of passing through a 4x4 mesh during a shake test.

72. (New) The method claim 66, wherein , at least five weight percent of the fibrous material is capable of passing through a 4x4 mesh during a shake test.

73. (New) The method claim 67, wherein , at least five weight percent of the fibrous material is capable of passing through a 4x4 mesh during a shake test.

74. (New) The method claim 68, wherein , at least five weight percent of the fibrous material is capable of passing through a 4x4 mesh during a shake test.

75. (New) The method claim 69, wherein , at least five weight percent of the fibrous material is capable of passing through a 4x4 mesh during a shake test.

76. (New) The battery manufactured by the process of claim 33.

77. (New) The battery manufactured by the process of claim 66.

78. (New) The battery manufactured by the process of claim 67.